DEPARTMENT OF TRANSPORTATION

DIVISION OF NEW TECHNOLOGY, MATERIALS AND RESEARCH 5900 Folsom Boulevard Sacramento, California 95819-4612



METHOD OF TEST FOR TRIAXIAL COMPRESSION OF SOILS

CAUTION: Prior to handling test materials, performing equipment setups, and/or conducting this method, testers are required to read "SAFETY AND HEALTH" in Section D of this method. It is the responsibility of whoever uses this method to consult and use departmental safety and health practices and determine the applicability of regulatory limitations before any testing is performed. Users of this method do so at their own risk.

A. SCOPE

Triaxial compression tests are done to determine the strength and stress-strain relationships of either undisturbed or remolded cohesive soils. Testing may be done in an unconsolidated-undrained (UU) condition or in a Consolidated-undrained (CU) condition. In the UU test, the test specimen is sheared at a constant rate of deformation with no drainage allowed. For CU testing, the sample is isotropically consolidated prior to shearing. Again, the rate of axial deformation is kept constant and the sample is not allowed to drain.

B. UNCONSOLIDATED-UNDRAINED TRIAXIAL TESTING

This test shall be done in accordance with ASTM: D 2850.

C. CONSOLIDATED-UNDRAINED TRIAXIAL TESTING

This test shall be done in accordance with ASTM: D 4767.

D. SAFETY AND HEALTH

Prior to handling, testing or disposing of any waste materials, testers are required to read: Part A (Section 5.0), Part B (Sections: 5.0, 6.0 and 10.0) and Part C (Section 1.0) of Caltrans' Laboratory Safety Manual.

REFERENCES:

ASTM Designation: D 2850 and D 4767.

End of Text. California Test 230 contains 1 page.